

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF SOUTH CAROLINA

In the Matter of the Petition of the South
Carolina Telephone Coalition for a
Determination that Wireless Carriers are
Providing Radio-Based Local Exchange
Services in South Carolina that Compete
with Local Telecommunications Services
Provided in the State

Docket 2015-290-C

**RESPONSIVE TESTIMONY OF DON PRICE
ON BEHALF OF CTIA – THE WIRELESS ASSOCIATION®**

October 13, 2015

1 **I. INTRODUCTION**

2 Q. **Please state your name and business address.**

3 A. My name is Don Price. My business address is 107 Rainbow Dr. #708,
4 Livingston, TX, 77399.

5 Q. **By whom are you employed, and in what capacity?**

6 A. I am a consultant specializing in public policy issues in the communications
7 industry.

8 Q. **Please provide a brief description of your educational background,
9 background and industry experience.**

10 A. I have more than thirty-five years of experience in the communications
11 industry, beginning in 1979 with my employment in GTE Southwest's
12 network planning organization. In my five years with the company I held
13 several positions of increasing responsibility and became knowledgeable
14 about incumbent Local Exchange Carrier ("ILEC") network design and
15 operation, the workings of the business office, and issues surrounding tariffs,
16 revenues and billing systems. I left GTE for the Texas Public Utility
17 Commission in late 1983, where I performed telephone rate analysis for the
18 PUC and testified in various tariff proceedings and rate cases. My
19 responsibilities at the Texas Commission were expanded to encompass all
20 telecommunication rate and tariff recommendations before the agency. In
21 late 1986, I accepted a position as a rate specialist with MCI, where I became
22 versed in the operations of a large interexchange carrier and the complexities
23 of an evolving intercarrier compensation system.

1 With MCI's acquisition of Western Union Access Transmission
2 Services' assets in the early 1990s, I was promoted to a new position focused
3 on local service competition issues. Following passage of the federal
4 Telecommunications Act in 1996, I was directly involved in negotiating
5 several interconnection agreements between the MCI metro Competitive
6 Local Exchange Carrier ("CLEC") and ILECs, and provided testimony in a
7 number of state arbitration proceedings. With the close of Verizon's
8 acquisition of MCI in January 2006, I became Director – State Public Policy
9 for Verizon's Government Affairs organization. In that position, I helped to
10 coordinate the company's public policy positions as they affected its ILEC,
11 CLEC, interexchange carrier ("IXC") and wireless interests.

12 During the course of my career I have testified before regulatory
13 agencies in at least 27 states, as well as before the Federal Communications
14 Commission ("FCC") and in court proceedings on a wide range of issues,
15 including: the role of regulation in competitive markets; the appropriate
16 structure and policy of universal service programs and intercarrier
17 compensation rates; and technical, rate and policy issues on interconnection,
18 including resale and unbundled network element matters in state
19 interconnection agreement arbitrations.

20 My educational qualifications include a Bachelor of Arts degree in
21 Sociology from the University of Texas at Arlington, earned in 1977. I
22 received a Master of Arts degree in Sociology from the University of Texas at
23 Arlington in 1978.

1 Q. **On whose behalf are you providing this testimony?**

2 A. My testimony is offered on behalf of CTIA – The Wireless Association®. CTIA
3 is an international nonprofit membership organization that has represented
4 the wireless communications industry since 1984. Membership in the
5 association includes wireless carriers and their suppliers, as well as
6 providers and manufacturers of wireless data services and products. More
7 information about CTIA is available on the Association’s website at
8 <http://www.ctia.org/about-us>.¹

9 Q. **Have you previously testified before the South Carolina Public Service**
10 **Commission (“Commission”)?**

11 A. Yes, I have.

12 Q. **What is the purpose of your testimony?**

13 A. The purpose of my testimony is to respond to certain points raised in the
14 testimonies of South Carolina Telephone Coalition (“SCTC”) witnesses Larry
15 Thompson, Emmanuel Staurulakis, Douglas Duncan Meredith, and H. Keith
16 Oliver. My testimony is organized in three substantive sections. In the first
17 section, I discuss the appropriate framework for assessing SCTC’s requested
18 relief and show that SCTC’s witnesses fail to provide evidence concerning the
19 criteria for determining whether particular wireless services compete with
20 particular local telecommunications services. I also explain how the
21 information provided by SCTC’s witnesses is deeply flawed. In the second
22 section, I explain that, even putting the statutory criteria aside, wireless

¹ CTIA appears in this case on behalf of itself and members Sprint, T-Mobile, TracFone, US Cellular, and Verizon.

1 carriers should not be required to contribute to the USF as a matter of policy.
2 Among other things, I note that wireless carriers pay millions of dollars to
3 South Carolina ILECs, doing more than their share to support local wireline
4 networks. In the third section, I explain that South Carolina has met its
5 objective of providing universal service and can continue to meet that goal
6 while reducing the size of the USF. That approach would relieve pressure on
7 the fund created by the decrease in access lines resulting from the state's
8 laudable pro-competition policy.

9 Q. **What relief is SCTC requesting in this proceeding?**

10 A. SCTC is asking for a determination by the Commission that wireless carriers
11 provide radio-based local exchange services that compete with local
12 telecommunications services.

13 Q. **What are the ramifications of such a determination?**

14 A. If SCTC's requested relief is granted, wireless carriers and their customers
15 would be required to contribute to the South Carolina Universal Service Fund
16 ("USF"), increasing fees for wireless subscribers and discouraging buildout
17 by wireless carriers.

18 Q. **Have the SCTC witnesses met the statutory criteria for such a**
19 **determination?**

20 A. No. For reasons I will explain, the SCTC witnesses do not even try to address
21 the statutory criteria for determining whether a particular wireless service
22 competes with a local telecommunications service, much less provide
23 evidence that would satisfy those criteria.

1 Q. **As a matter of public policy, should wireless carriers be required to**
2 **contribute to the South Carolina USF?**

3 A. No. It is bad public policy to impose taxes on new and innovative
4 technologies. Imagine how transportation would have developed in the early
5 part of the Twentieth Century if buggy whip manufacturers had been
6 subsidized by imposing taxes on automobile manufacturers. Furthermore,
7 wireless customers already pay South Carolina ILECs millions of dollars for
8 their services, which include transporting wireless traffic from cell towers to
9 wireless carriers' switches and originating and terminating traffic to and
10 from wireless carriers. In addition, wireless carriers contribute billions of
11 dollars to the federal USF program, which benefits the SCTC companies by
12 roughly \$100 million each year. In other words, wireless carriers already
13 pay more than their fair share to support wireline networks in South
14 Carolina.

15 Q. **Is there any way to address SCTC's apparent concern that the number of**
16 **wireline customers that pay into the USF is decreasing?**

17 A. Yes. As I will explain, the decrease in landlines is part of a fundamental
18 transformation in the industry that is furthering the goal of universal service
19 with less reliance on traditional telephone services. The goal of universal
20 service can now be accomplished with a smaller fund, meaning a smaller
21 burden on consumers.

22

1 **II. THE SCTC WITNESSES FAIL TO ADDRESS THE STATUTORY CRITERIA IN**
2 **SECTIONS 58-9-280 (E)(3) AND (G)(1).**

3 **A. Statutory Criteria**

4 **Q. Are you familiar with the criteria established by the Legislature for the**
5 **Commission to apply in this proceeding?**

6 A. Yes. Although I am not a lawyer, I have been informed by counsel that the
7 applicable criteria are provided in subsections 58-9-280 (E)(3) (“Subsection
8 (E)(3)”) and (G)(1) (“Subsection (G)(1)”) of the South Carolina Code.

9 Subsection (E)(3) states:

10 The commission also shall require any company providing
11 telecommunications service to contribute to the USF if, after notice
12 and opportunity for hearing, the commission determines that the
13 company is providing private local exchange services or
14 radio-based local exchange services in this State that compete with
15 a local telecommunications service provided in this State.

16 I am also familiar with the standard for determining whether one
17 service competes with another, as provided in Subsection (G)(1):

18 Competition exists for a particular service if, for an identifiable
19 class or group of customers in an exchange, group of exchanges, or
20 other clearly defined geographical area, the service, its functional
21 equivalent, or a substitute service is available from two or more
22 providers.

23 **Q. Have you reviewed the evidence presented by SCTC against these**
24 **statutory criteria?**

25 A. Yes, in particular I have assessed SCTC’s evidence in the context of the
26 following statutory criteria:

- 27 ○ The “particular service” with which competition is alleged;

- 1 ○ The “identifiable class or group of customers” of the service;
- 2 ○ A “clearly defined geographic area” in which those customers
- 3 consume the defined service; and
- 4 ○ The presence of “two or more providers” making available “the
- 5 service, its functional equivalent, or a substitute service” to the
- 6 defined customer class in the defined geographic area.

7 These factors are similar to and consistent with competition tests I have
8 found in other jurisdictions.

9 **Q. Do the testimonies of the SCTC witnesses satisfy these criteria?**

10 **A. No.** For the most part, the SCTC witnesses do not even attempt to address
11 these criteria, much less satisfy them. I address each of the criteria below.

12

13 **1. Competing Services**

14 **Q. Do the SCTC witnesses identify particular services with which they**
15 **allege a wireless carrier’s service is competing?**

16 **A. No.** None of the SCTC witnesses discusses particular, defined or identifiable
17 services provided by landline companies. Rather, they use a number of terms
18 indiscriminately that refer either to local wireline service or wireline service
19 in general. By my count, their testimonies use twenty-three generic terms
20 for wireline services: “basic local service,” “competitive voice service,”
21 “domestic voice service,” “landline services,” “landline telephone service,”
22 “local exchange service,” “local exchange voice telephone service,” “local
23 telecommunications services,” “local voice service,” “local wireline
24 telecommunications service,” “phone service,” “telecommunications

1 services," "telephony services," "traditional LEC service," "traditional home
2 phone service," "traditional wireline service," "voice service," "wireline LEC
3 voice services," "wireline local exchange service," "wireline local exchange
4 carrier service," "wireline service," "wireline telephone service," and
5 "wireline voice telephone service."

6 **Q. Do the SCTC witnesses mention a particular wireless service in their**
7 **discussions of alleged competition?**

8 A. Generally, no. For the most part, they refer to wireless services generically
9 without specifying a particular wireless service provided by an identified
10 carrier. Mr. Thompson's testimony mentions T-Mobile's @Home, Verizon's
11 "Home Phone Service," "Sprint Phone Connect 3," and "AT&T Wireless Home
12 Phone" offerings, but he does not describe these services or provide any data
13 about them. (Thompson Dir. at 9). In large measure, Mr. Thompson simply
14 refers to wireless (and wireline) service in general, such as when he
15 describes the chart captioned "Figure 2" as follows:

16 [The chart] shows that while the number of ***total subscriptions***
17 ***for telephony*** (which the FCC distinguishes from broadband) has
18 remained relatively constant, the decline in ***retail switched access***
19 ***lines*** (traditional LEC service) has been supplanted largely by
20 increasing ***wireless telephony subscriptions***.

21 (Id., at 7, lines 4-7, emphasis added). Similarly, Mr. Meredith's discussion of
22 analyses by the Division of Health Interview Statistics, National Center for
23 Health Statistics, does not specify any particular wireless service. (Meredith
24 Dir. at 13-17).

25

1 2. **Classes or Groups of Customers**

2 Q. **Do SCTC's witnesses describe the classes of customers served by any of**
3 **their local telecommunications services?**

4 A. No. SCTC's witnesses do not specifically discuss any class or group of
5 customers, but instead, make sweeping references to "end users."

6 Q. **In trying to determine the presence of competition, is it necessary to**
7 **require information on a specific class or group of customers?**

8 A. Yes, the statute expressly refers to "an identifiable class or group of
9 customers." From a policy standpoint, there is good reason to require such
10 specificity. Because carriers have traditionally offered services at varying
11 rates to different classes of customers, it is important to identify a particular
12 customer class for analytical purposes. As an example, SCTC witness
13 Meredith presents a general discussion on the price elasticity of demand.
14 (Meredith Dir. at 12) There, he references a study on "price elasticity
15 between wireless and wireline services." However, he fails to specifically
16 discuss a particular service provided to an identified class or group of
17 customers. This is a critical omission, because regulators have long
18 recognized the price elasticity of demand is different, for example, for
19 business customers and for residential customers.

20

1 **3. Clearly Defined Geographic Area**

2 **Q. Do SCTC's witnesses provide evidence of a clearly defined geographic**
3 **area?**

4 A No. To the contrary, Mr. Meredith testifies (at p. 6) that he believes the *entire*
5 *state* is a clearly defined geographic area and should be used to meet this
6 criterion.

7 **Q. Can the entire state be used as a clearly defined geographic area?**

8 A. No. As an initial matter, I am guided by Subsection (G)(1)'s reference to "an
9 exchange, group of exchanges, or other clearly defined geographical area,"
10 which appears to contemplate an area served by a particular local exchange
11 carrier. This conclusion is confirmed by the other parts of Subsection (G)(1),
12 which refer to a "particular service" and an "identifiable class or group of
13 customers." These are terms which would be associated with a specific
14 carrier. Mr. Meredith does not provide any evidence that any specific
15 wireless carrier serves any statutorily relevant geographic area. Moreover,
16 under Subsection (G)(1)(b), a local exchange carrier satisfying the test for a
17 particular service is entitled to have that service deregulated, which also
18 demonstrates that the test must be applied in an individual carrier's service
19 area.

20 **Q. According to SCTC, how much of the geographic area does a wireless**
21 **carrier need to serve in order to meet the statutory test?**

22 A. Mr. Thompson testifies (at p. 6) that any overlap in service territory is
23 sufficient.

1 **Q. How does SCTC’s position contrast with the criteria set forth in**
2 **Subsections (E)(3) and (G)(1)?**

3 A. SCTC’s position makes the statutory criteria irrelevant. SCTC’s view appears
4 to be that if any wireless carrier provides service anywhere in the state, all
5 wireless carriers’ 4.5 million subscribers must contribute to the USF,
6 regardless of whether there is any actual competition. Had the Legislature
7 intended Subsections (E)(3) and (G)(1) to have been met so easily, there
8 would have been no point to establishing the statutory test in the first place.

9 **Q. Are there valid policy reasons to require competitive information for a**
10 **“clearly defined geographical area?”**

11 A. Absolutely. The purpose of evaluating claims of competition is to implement
12 appropriate and reasonable public policies. The information required by
13 statute is the minimum data threshold the Legislature considered
14 appropriate to position the Commission to make important decisions
15 regarding the subsidy burden it would impose on South Carolinians. Here,
16 the SCTC companies are asking that their USF subsidies be paid by millions of
17 wireless carriers’ customers in the State. That requested relief would
18 constitute a major shift in Commission policy, and must be based on solid
19 evidence.

20 In contrast with the “shotgun” approach in the SCTC testimony, a
21 recent proceeding in Colorado to identify “effective competition areas”
22 examined substantial data at the level of the individual wire center – a much
23 more granular approach than is offered here by SCTC.

1 **4. Provision of a Functionally Equivalent or Substitute Service**

2 **Q. Do the SCTC witnesses provide evidence that any particular wireless**
3 **carrier's service is the functional equivalent of or a substitute for any**
4 **local telecommunications service?**

5 A. No.

6 **Q. Do wireless carriers provide local telecommunications service?**

7 A. No, not to my knowledge. Unlike landline companies, wireless carriers
8 typically only offer all-distance services.

9 **Q. Is it possible to make a local call from a wireless phone?**

10 A. It is certainly possible to make a call from a wireless phone to a landline
11 when the wireless caller happens to be in the called party's local calling area.
12 But I am not aware of any wireless carriers that have local calling areas for
13 retail purposes.

14 Unlike the SCTC member companies whose basic local exchange
15 services are limited to calling within particular, prescribed local calling areas,
16 wireless carriers offer a variety of all-distance service bundles with
17 nationwide (and, sometimes, international) calling ranges. Prices for the
18 wireless bundles vary widely, but those prices tend to be significantly higher
19 than the basic local service rates charged by the SCTC member companies.

20

1 5. **Summary**

2 Q. **Please summarize your discussion of the factors listed in Subsection**
3 **(G)(1) for identifying statutory competition.**

4 A. The SCTC witnesses do not present information that addresses the applicable
5 statutory criteria. They do not identify particular wireless services or local
6 telecommunications services, classes of customers or specific geographic
7 areas for particular ILECs. And they fail to show that any wireless carrier
8 offers a functional equivalent or substitute for each of the SCTC member's
9 local telecommunications services.

10

11 B. **SCTC's Testimony on Wireless Competition**

12 Q. **If SCTC does not attempt to meet the statutory criteria, what evidence**
13 **does it attempt to rely on?**

14 A. The evidence presented by the SCTC witnesses falls into four categories.
15 They provide information suggesting that wireless service is available in
16 SCTC member service areas, information concerning wireless substitution
17 and penetration rates for wireless and wireline services, information
18 comparing wireline and wireless services in general, and information
19 concerning other states' high-cost funds to which wireless carriers are
20 required to contribute.

21 Q. **Can you generally respond to SCTC's evidence?**

22 A. Yes. None of that information deals with the statutory criteria I previously
23 discussed, so it has no bearing on whether the requested relief should be

1 granted. But regardless, the SCTC witnesses' testimony is deeply flawed in a
2 number of respects. Although their testimony does not address, much less
3 satisfy, the statutory criteria governing this case, I briefly note some of the
4 concerns I have with the information they have presented.

5 **Q. Please address information provided by SCTC witnesses suggesting that**
6 **wireless service is available in SCTC member service areas.**

7 A. The witnesses present data showing the four largest wireless carriers'
8 coverage maps (Thompson's Exhibits LT-2 through LT-5, Meredith at 7-9),
9 data on the number of wireless carriers' cell towers and associated circuits
10 located in the SCTC member companies' territories (Staurulakis at 6-7), and
11 data on telephone number blocks assigned to wireless carriers and telephone
12 numbers ported to wireless carriers (Staurulakis at 7-8, 10). This
13 information relates to how wireless carriers' networks are designed,
14 constructed, and operated. As I will explain, the information does not
15 demonstrate any degree of statutory competition, as defined by Subsection
16 (G)(1), between the SCTC member companies and wireless carriers.

17 The wireless coverage maps Mr. Thompson and Mr. Meredith present
18 show only information at the state-wide level, and fail to shed any light on
19 competition between any of the SCTC member companies and wireless
20 carriers. At best, the maps merely illustrate that wireless carriers' networks
21 are designed to serve their customers no matter where those customers may
22 be at any given moment. A wireless customer from one part of the state, or
23 from out-of-state, that happens to be passing through one of the SCTC

1 member companies' areas would reasonably expect to be able to use her
2 wireless phone. That does not mean that the wireless and wireline
3 companies are competing, since that wireless subscriber is not in the market
4 for wireline service in that area.

5 Similarly, the cell tower information presented by Mr. Staurulakis and
6 the quantity of circuits wireless carriers obtain to connect with those towers
7 sheds no light on the extent to which wireless carriers compete with the
8 SCTC member companies. Cell towers and connecting circuits represent the
9 means by which wireless carriers provide coverage for their customers. As
10 such, they can be used by any wireless carrier's customer from anywhere in
11 the country who may be driving through the area. One or more cell towers
12 (and its connecting circuits) simply demonstrates the existence of coverage
13 by a wireless carrier, but says nothing about competition, and certainly not at
14 the local exchange level – the level of granularity specified in the statute.

15 **Q. Please address information provided by SCTC witnesses regarding**
16 **blocks of telephone numbers and the quantity of telephone numbers**
17 **“ported out” from the SCTC member companies to wireless carriers.**

18 A. The number administration process requires that carriers obtain telephone
19 numbers for use by their potential customers in quantities that are “lumpy.”
20 By lumpy, I mean that telephone numbers are used by carriers in quantities
21 of 1,000 numbers, each of which is referred to as a “thousands block.” There
22 are at least three reasons why reference to the number of thousands blocks
23 assigned to a given group of carriers is not instructive for assessing

1 competition under the statute. First, we do not know the “utilization” of
2 those telephone numbers by a carrier or group of carriers without additional
3 information. The “utilization” level is important because it tells whether only
4 a few – or many – telephone numbers within the thousands blocks at issue
5 are actually assigned to users, but no information on utilization was
6 presented by SCTC.

7 Another reason why information on the quantity of thousands blocks
8 assigned to wireless carriers is not pertinent to the statutory test for
9 competition appears in the testimony of SCTC witness Meredith. Mr.
10 Meredith presents graphic information -- Graph 3, at page 15 --
11 demonstrating that the largest group of South Carolina subscribers are those
12 that have both wireless and wireline subscriptions – the “dual use”
13 subscribers. This large “dual use” group means that a substantial quantity of
14 telephone numbers are not replacing or competing with traditional services,
15 but rather are complementary to those services.

16 A third reason that the number block information fails to prove
17 anything is that wireless carriers assign telephone numbers to every device,
18 even those devices that have **no** ability to make a voice call. An example of
19 such a device is an Internet device used solely to provide data connectivity
20 for, e.g., a Wi-Fi hot spot.

21 Finally, Mr. Staurulakis’ testimony on the quantity of telephone
22 numbers ported out from the SCTC companies should be viewed in context.
23 On the one hand, he points to the quantity of thousands blocks to support a

1 total of “1.3 million telephone numbers available for distribution by wireless
2 carriers.” (Staurulakis at 7.) But citing 2014 information provided by nine
3 SCTC member companies, he cites to a mere 275 “port outs” from wireless
4 carriers.

5 Simply stated, the information presented on number blocks and “port
6 outs” fails to provide evidence establishing satisfaction of the factors the
7 Commission must use in assessing competition.

8 **Q. Please address information provided by SCTC witnesses concerning**
9 **wireless substitution and penetration rates for wireless and wireline**
10 **services.**

11 A. The testimonies on this topic (Thompson, Meredith) fail to even mention the
12 impact that cable and other providers are having on the subscription levels of
13 traditional local exchange carriers. Furthermore, neither witness presents
14 any evidence that customers purchasing basic local exchange service on a
15 stand-alone basis are moving to the all-distance offerings of wireless carriers.
16 And, as discussed above, the SCTC witnesses fail to relate the evidence to the
17 statutory criteria for a determination of competition by the Commission.

18 The testimony on interconnection agreements with wireless carriers
19 is similarly unconvincing. National carriers must have the ability to
20 terminate traffic nationally. It does not follow, and SCTC has not established,
21 that **mobile** customers reside everywhere that national carriers have
22 interconnection agreements. National carriers may also have
23 interconnection agreements to govern international traffic, but that, too, does

1 not establish that their customers reside overseas. SCTC's reference to
2 interconnection agreements fails to establish satisfaction of the statutory
3 criteria.

4 Finally, witnesses Thompson (at 10, 19) and Staurulakis (at 11-12)
5 cite to passages from public statements by AT&T and Verizon as evidence of
6 "substitution" to support SCTC's requested relief. The referenced statements
7 simply describe a communications industry in transition, which is quite
8 obvious to even a casual observer of the industry. However, the evidence is
9 not specific to a particular service or area of the country, and provides no
10 South Carolina-specific facts.

11 **Q. Please address information provided by SCTC witnesses comparing**
12 **wireline and wireless services in general.**

13 A. Mr. Thompson goes to considerable lengths to explain that both wireline
14 telephone service and wireless telephone service enable customers to place
15 and receive calls. There is no debate that both services offer that
16 functionality, but Mr. Thompson fails to compare particular wireline and
17 wireless services. For the reasons I have explained, the sort of high-level
18 comparisons Mr. Thompson makes fail to meet the statutory test.

1 **Q. Is information provided by SCTC witnesses concerning other states’**
2 **high-cost funds to which wireless carriers are required to contribute**
3 **germane to the Commission’s determination of competition as defined**
4 **by statute?**

5 A. Generally speaking, no. South Carolina law, as described above, governs
6 whether wireless providers must contribute to the USF. Obviously, the laws
7 of other states determine whether their state commissions may establish
8 universal service funds and require wireless carriers to contribute. That
9 said, the 2015 NRRI study cited by Mr. Staurakis reports that half the states
10 do *not* have high-cost or intrastate access support funds. (NRRI, *State*
11 *Universal Service Funds 2014* (2015).)

12

13 **III. AS A MATTER OF PUBLIC POLICY, WIRELESS CARRIERS SHOULD NOT BE**
14 **REQUIRED TO CONTRIBUTE TO THE USF**

15 A. **Requiring Wireless Carriers, and Their Customers, to Contribute to the**
16 **USF Conflicts with Sound Public Policy**

17 **Q. As a matter of public policy, should the Commission require wireless**
18 **carriers to contribute to the USF?**

19 A. No. The following are just some of the reasons that the relief requested in
20 the Petition would be detrimental to South Carolinians:

- 21 • If granted, the Petition effectively would impose a new tax on 4.5 million
22 South Carolina wireless subscribers. A typical South Carolinian with a family
23 share plan costing \$100 per month already pays \$200 a year in taxes on

1 wireless service. He or she should not have to pay more. That is particularly
2 true for the many consumers who have dropped their wireline service for the
3 very reason that they wanted to avoid wireline charges.

4 • Increasing wireless charges in South Carolina, the state with the eighth
5 lowest median income, is especially problematic because poor customers are
6 less likely to be able to afford multiple means of communication and more
7 likely to rely exclusively on cell phones not only for voice service, but also for
8 access to the Internet. According to a study conducted by Pew Research, low
9 income customers are thirteen times more likely to rely on their cell phone
10 for broadband access than households earning more than \$75,000 per year.

11 • The Commission should not charge new, growing technologies to support
12 older technologies that are attracting fewer and fewer customers. That
13 approach would be misguided because it discourages innovation as well as
14 economic growth and job growth.

15 • Ultimately customers must determine which technologies succeed and fail in
16 the marketplace. The government should not try to pick winners and losers
17 through subsidies and taxes.

18

1 **B. Wireless Carriers Already Pay SCTC Members Millions of Dollars to Use**
2 **Their Networks**

3 **Q. For what purposes do the networks of wireless carriers and local**
4 **exchange carriers interconnect?**

5 A. There are two principal ways in which the networks of wireless carriers and
6 LECs interface. The first involves circuits that connect a wireless carrier's
7 radio equipment on a tower with that wireless carrier's data and switching
8 networks. These are referred to as "backhaul" circuits. Backhaul circuits
9 handle voice, data and text traffic to and from wireless carriers' networks.
10 For example, if a wireless customer passing through an SCTC member's
11 service area makes a call, the wireless signal is transmitted to mobile
12 equipment on a cell tower, transported over wireline facilities (probably
13 leased by the wireless carrier from the SCTC member), and handed off to the
14 wireless carrier's mobile switching center. From that point, the wireless
15 carrier sends the call to its destination. Note that this traffic is not switched
16 by the SCTC member, but merely transported from one part of the wireless
17 carrier's network to another.

18 The second way that wireless and LEC networks interface is through
19 interconnection arrangements through which they exchange traffic. In the
20 example I just provided, if the wireless customer passing through the SCTC
21 member's service area happened to be calling an SCTC member's customer,
22 the wireless carrier would route the call from its mobile switching center
23 over interconnection trunks so the SCTC member could switch the call and

1 terminate it to its customer. Such interconnection circuits are separate and
2 distinct from backhaul circuits in purpose and network architecture.

3 For the reasons I have just outlined, it is reasonable to assume that the
4 vast majority of the 1,600 circuits mentioned by Mr. Staurulakis are backhaul
5 circuits. Importantly, such circuits are profitable and the SCTC companies
6 are compensated handsomely for those facilities. A reasonable assumption
7 for the average monthly rate for a typical circuit (a DS1) purchased by a
8 wireless carrier from the National Exchange Carrier Association tariff would
9 be \$842.76 per month. For one such circuit, an SCTC member company is
10 billing approximately \$10,113.12 per year. Using the quantity stated in Mr.
11 Staurulakis' testimony (1,600 circuits), the total charges for those circuits is
12 \$16 million each year. Given that wireless carriers continue to expand their
13 networks, that number is much more likely to grow than to decrease.

14 **Q. Do SCTC members benefit from the arrangements you just described?**

15 A. Yes. Wireless carriers must pay SCTC members for backhaul circuits and for
16 the origination and termination of certain traffic that is exchanged over the
17 interconnection circuits. It should also be noted that this income stream has
18 undoubtedly grown considerably since the USF was established by the
19 Commission because wireless carriers have built out their networks
20 substantially since the USF was created. This \$16M annual income stream is
21 an example of the type of data the Commission should demand from the SCTC
22 members before imposing a new tax on 4.5 million wireless customers

1 (customers who already indirectly fund the \$16M income stream the SCTC
2 members enjoy).

3 **Q. You said that wireless carriers must pay SCTC members to originate**
4 **and terminate certain traffic exchanged over interconnection circuits.**
5 **For what traffic are SCTC members compensated?**

6 A. They are compensated for traffic that originates in one major trading area
7 (MTA) and terminates in another. MTAs function in the wireless world much
8 as LATAs in the wireline world. Wireless calls within an MTA are handled on
9 a bill-and-keep basis, and calls between MTAs are subject to access charges.
10 Since three MTAs divide South Carolina, SCTC members certainly receive
11 compensation for inter-MTA intrastate and inter-MTA interstate traffic.

12 **Q. Are wireless carriers compensated for the inter-MTA traffic they**
13 **originate or terminate?**

14 A. No. Only landline carriers receive such compensation. So while SCTC
15 members receive compensation from wireless carriers for inter-MTA traffic,
16 they do not have to pay wireless carriers such compensation.

17 **Q. SCTC's witnesses suggest that because wireless carriers "rely" on their**
18 **networks, they should be required to contribute to the USF. Is this a**
19 **valid point?**

20 A. No. Through their payments for backhaul circuits and intercarrier
21 compensation, wireless carriers already pay many millions of dollars to SCTC
22 members, which they can use (in addition to their other revenue streams) to
23 support their networks. SCTC's witnesses are 180 degrees wrong. These

1 arrangements show that wireless carriers are paying more than their fair
2 share to support wireline networks and provide no basis for requiring
3 wireless carriers to pay even more.

4 **Q. Do wireless carriers pay into the federal universal service fund that**
5 **supports SCTC members?**

6 A. Yes. SCTC members receive approximately \$100 million from the federal
7 universal service fund. That significant source of funding is in large part paid
8 by wireless carriers.

9

10 **IV. THE USF SHOULD BE REDUCED AS SOUTH CAROLINA HAS ACHIEVED**
11 **THE GOAL OF UNIVERSAL SERVICE**

12 A. **The South Carolina Universal Service Fund**

13 **Q. How is “universal service” defined under South Carolina law?**

14 A. The statute defines universal service as the State’s “commitment to
15 universally available basic local exchange telephone service at affordable
16 rates.” The emphasis on service availability at affordable rates is consistent
17 with the notion that universal service policies should benefit *consumers* and
18 be neutral regarding particular service providers.

19 **Q. When, and under what circumstances, was the existing South Carolina**
20 **USF established?**

21 A. The Commission established the USF in 2001 and determined that the USF
22 should be sized initially to offset a 50% reduction in intrastate switched
23 access rates. The fund was sized to replace a portion of revenues previously

1 paid by interexchange carriers in the state, modifying a subsidy system that
2 had been established at the break-up of the Bell system in the 1980s. At the
3 time of the Commission's decision, wireless phones were a new
4 phenomenon, the public Internet was in its infancy, and caller ID was
5 considered a significant innovation. Since then, market forces and other
6 factors have eroded switched access revenues and access lines, but the USF
7 continues to replicate the ILECs' earlier revenue stream, financially
8 immunizing ILECs from the changes in technology and customer preferences
9 that have shaped today's modern communications ecosystem.

10 Q. **Regarding switched access charges, is it true, as SCTC argues, that states**
11 **without USFs rely more on implicit subsidies (i.e., access charges)?**

12 A. No. In fact, the opposite is true. Access revenues have proven to be an
13 unreliable source for at least two reasons. One reason is that carriers' access
14 minutes have been declining for years. Another reason is the lowering of
15 switched access rates. In other words, implicit support through switched
16 access has in fact declined in states without USFs. This is one of the reasons
17 cited by the FCC in its Intercarrier Compensation Reform Order for
18 overhauling switched access rates and moving to more direct subsidy
19 mechanisms.

20

1 **B. The Goal of Universal Service Has Been Achieved in South Carolina**

2 **Q. How have regulators typically measured progress in meeting the policy**
3 **goal of service availability at affordable rates?**

4 A. The most commonly used metric for this goal is the proportion of households
5 with some form of telephone service, often referred to as the “penetration
6 rate.” In terms of public policy, regulators have traditionally focused on
7 prices for basic residential local exchange telephone service. However, for
8 statistical purposes, the FCC includes all service bundles and other offerings
9 that are capable of placing “local” calls. Data is typically collected annually at
10 the state level by the FCC and then for federal purposes aggregated to a
11 national average penetration rate.

12 **Q. Based on those standards, has universal service been achieved in South**
13 **Carolina?**

14 A. Yes. According to the most recent data (data received through September
15 2014) released by the Federal and State Staff for the Federal-State Joint
16 Board on Universal Service (“Universal Service Monitoring Report,” Table
17 6.6), South Carolina registered 97.7% “voice penetration” in 2013, the same
18 as the national average. Since 2009, this rate has increased slightly,
19 demonstrating that South Carolinians indeed have access to basic local
20 exchange telephone service at affordable rates.

21

1 Q. **Do the South Carolina results compare favorably with other nearby or**
2 **adjacent states?**

3 A. Yes, they do. The Table below shows the 2013 penetration rates for select
4 other states, as shown in the same Universal Service Monitoring Report.

5 Table DP-1

<u>State</u>	<u>State Fund Size</u>	<u>2013 Penetration Rate</u>
SC	\$28M	97.7%
GA	\$15M	97.6%
NC	No state fund	97.8%
TN	No state fund	97.7%

6

7 Q. **What conclusions do you draw from this data?**

8 A. The penetration levels in these states are remarkably similar, regardless of
9 whether the state has established a universal service fund. The examples of
10 North Carolina and Tennessee, neither of which has a state high-cost fund,
11 show that consumers in those states have access to and purchase voice
12 communications at levels roughly equal to those in South Carolina.
13 Consumers in Georgia, which has a much smaller fund and a population more
14 than twice the size of South Carolina, likewise have access to and purchase
15 voice communications at levels equivalent to South Carolinians. That these
16 states have achieved similar penetration rates without a direct USF
17 mechanism (or, in the case of Georgia, one that is funded at a significantly
18 lower level for a much larger population) is an indication that the existing
19 South Carolina USF mechanism is unnecessary to achieve universal service.
20 It is noteworthy that the states of Georgia, North Carolina and Tennessee

1 have larger rural areas than the entirety of the State of South Carolina, with
2 Georgia's rural area nearly twice the size of South Carolina.

3 Q. **Is a vibrant competitive marketplace consistent with the goal of**
4 **universal service?**

5 A. Yes. In competitive markets, providers seek to differentiate their products
6 and services. Some providers emphasize lower prices, and others seek to
7 differentiate their product(s) on the basis of additional features and
8 functions, or perhaps having a better or more reliable product. Each of these
9 approaches yield benefits to consumers, furthering the goal of universal
10 service. One obvious example is the entry of wireless Eligible
11 Telecommunications Carriers into the market for voice service. Other
12 examples include VoIP telephony and Wi-Fi calling. The competitive market
13 is clearly promoting the growth of voice services, and this growth furthers
14 the goal of universal service.

15 Certain providers encourage policymakers to shield them from the
16 effects of competition for purely self-interested reasons. Such policies would
17 benefit those providers, but at the cost of denying the benefits of competition
18 to affected consumers.

19 Serious consideration of the various issues surrounding universal
20 service requires the Commission to engage in a comprehensive data
21 gathering effort and to broaden the scope of this proceeding. For example,
22 there is no transparency with the current South Carolina USF regarding use
23 of awarded funds, and no accountability by the recipients of USF subsidies to

1 ensure that such funding is being used for universal service purposes. The
2 Commission has no requirement for the recipients to disclose information on
3 their use of USF subsidies, meaning that the Commission has access to little
4 or no information on whether the funds are necessary for ensuring that
5 customers have access to basic local exchange service at affordable rates, or
6 how the monies are being used. Such issues must be addressed regardless of
7 the Commission's finding of competition in order to ensure that South
8 Carolina's consumers are not facing an unnecessary economic burden.

9 **Q. What steps should the Commission take concerning the USF?**

10 A. The Commission should comprehensively review and reduce the USF. USF
11 subsidies only should be provided as and if necessary to the extent
12 competitive market forces cannot sustain universal service in limited parts of
13 the state. As part of that review, the Commission should audit ILECs' use of
14 the USF funding they receive to assess whether it is necessary for, and being
15 used to promote, universal service.

16 **Q. Does this conclude your testimony at this time?**

17 A. Yes.